Repeater

(USB Dongle type)

Model Name: WIZCoM

User Manual

This device is Unique coupling antenna connector type.

(RP-SMA connector)

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Contents

1. General

The repeater (USB Dongle) receives the production quantity every set time from the mold counter that is mounted on the injection molding machine.

The repeater connects to an industrial PC and uses the information received from the mold counter to enable production counting, production management, mold asset management, and mold quality control by the Smart Mold Management System.

Smart Mold Management System(SMMS) enables real-time data inquiry, analysis and management anywhere in the world through Ethernet, mobile application, and cloud service.

① Description of main elements:
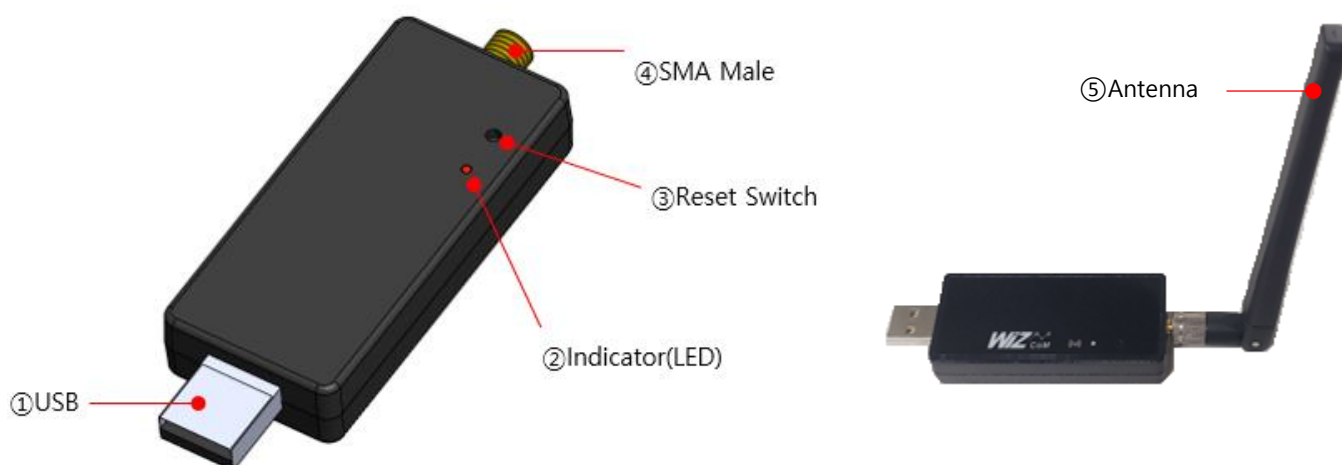
Features	
Core	ARM Cortex M3 32Bit
Communication	Sub-1GHz, ISM Band
Number of connectable counter	64pcs
Rated voltage	5Volt
Temperature	-20℃~+85℃
Dimension	82.8mm × 29mm × 12 mm

Industrial PC	
OS	Windows 10
Memory	4GB, Recommended 8GB RAM

I/O	USB 2.0, Ethenet

2. Program Execution

① Connect the repeater with USB port of the industrial PC.

② Run "Explore" or "Chrome" and enter 127.0.01:8080 in the address bar.

③ Click "SIGN IN" after enter "ID" and "PASSWORD".

3. Repeater Connection

① Check the com port in the path "My computer"→ "Management"→ "Device Manager"→"Port".

② Select "System"→ "Repeater" menu and select the com port and click the start button.

③ Click the check ch.

④ The channel of the repeater is displayed as "CHX" at the bottom of the screen.

4. Counter Registration

1) Add

① Select "System"→ "Counter" Menu.

② Click the add button.

③ Press the mode button for more than 2seconds while the active switch is pressed by finger.
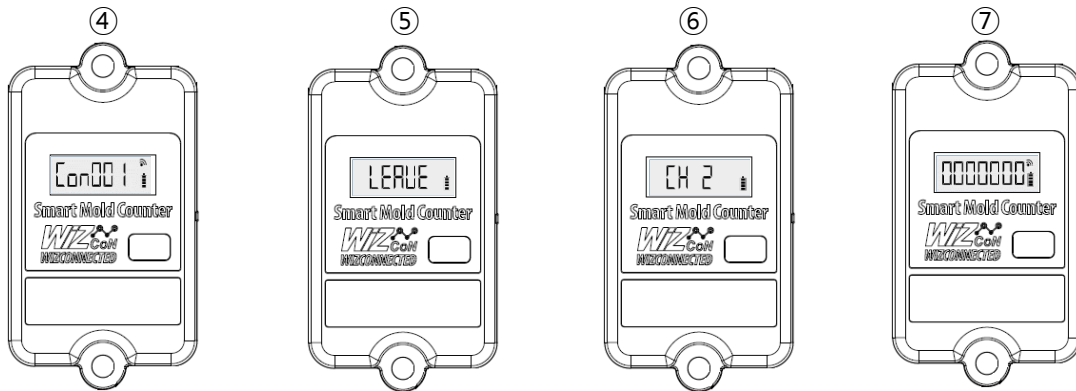
④ When the counter ID is displayed as "ConXXX" on the LCD screen, press the mode button shortly and move to "LEAVE".

⑤ When the "LEAVE" is displayed in the LCD screen, press the mode button twice shortly to select it.
- "LEAVE" does not blink if "LEAVE" is selected correctly.
- If it blinks, select again.

⑥ After selecting "LEAVE", press the mode button shortly to move to the channel of the repeater that is displayed at the bottom of the screen.

⑦ Press the mode button twice shortly to select the channel.
- "CHX" does not blink If "CHX" is selected correctly.
- If it blinks, select again.

⑧ When the channel selection is complete, the antenna icon will be displayed on the LCD.
- The connected "Repeater CH" will be displayed at the bottom of the SMMS program.
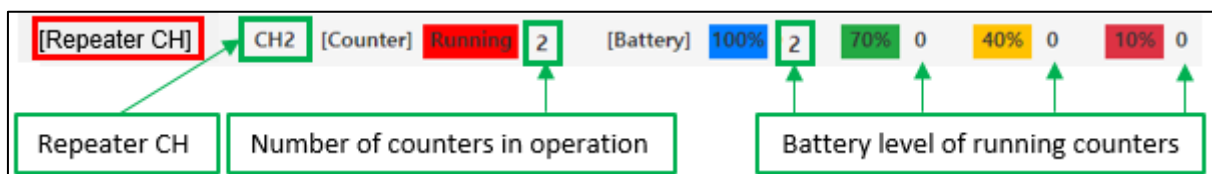
⑨ Click "Search" in SMMS(Smart Mold Management System) to check the connected counter.
- Select an added counter at the table.

⑩ Enter "0" in "Shot count" text box, select "Transmission cycle" and click "Set device" button.
- The counter ID is allocated automatically.

2) Delete

① Select "System"→ "Counter" menu.

② Select a counter to delete at the table.

③ Click "Delete" button at the upper-right side.

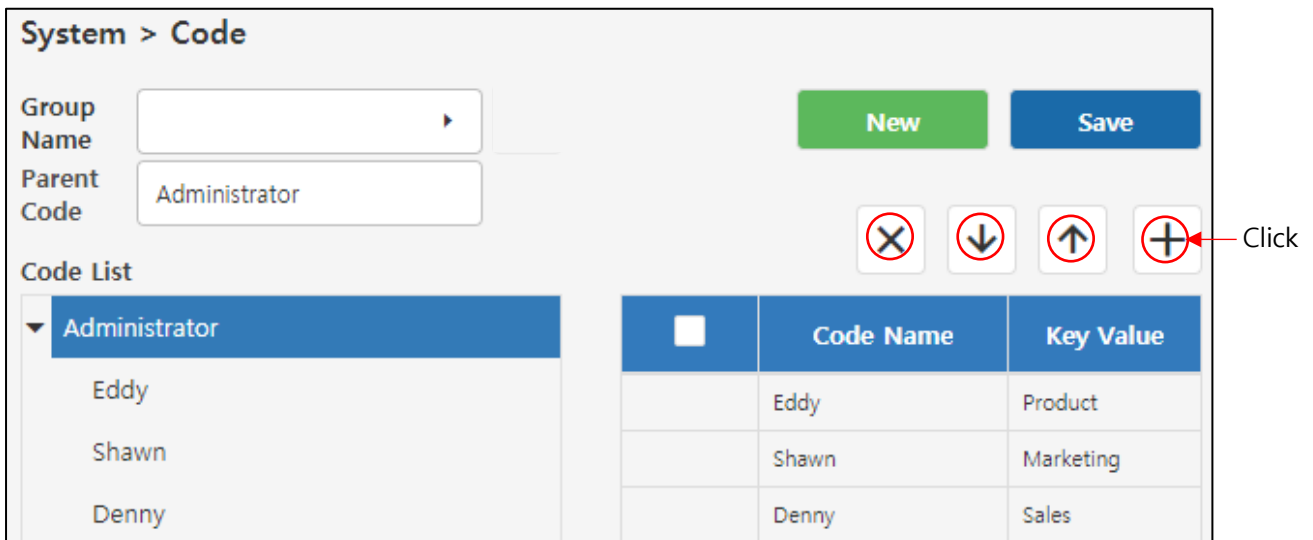④ The deleted counter information will be disappeared at the table.

2) Changing "Shot count" and "Transmission cycle"

① Select "System"→"Counter" menu.

② Select a counter to change from the counter list and enter "Shot count" in the text box, and select "Transmission cycle".
- The transmission cycle is initially set to one hour, and it can be changed in the counter menu.

③ Click "Set Device" button.

5. System

1) System > Code > Administrator

① Select "System"→ "Code" and select "Administrator" at a search filter of "Group Name".

② Click ⊕ button, and enter the administrator at a row of "Code Name" and enter "Key Value"

③ Select the item you want to move from the check box on the left and click ⊗ ⊗ arrow to move it to the desired position.

④ Select the item you want to delete from the check box on the left and click ⊗

⑤ Click "Save"

2) System > Code > Customer

① Select "System"→ "Code" and select "Customer" at a search filter of "Group Name".

② Click "+" and enter the customer name at a row of "Code Name" and enter "Key Value"

③ Click "Save"

④ Click ⊠ to delete the code name and key value.

3) System > Code > Department

① This menu is to set the department.

4) System > Code > Location

① This menu is to set the location of mold.

② If you replace the mold with another one or store the mold in the warehouse, you must enter the location.

5) System > Code > Manufacturer

This menu is to set the name of mold manufacturer.

6) System > Code > Material

This menu is to set the material of resin.

7) System > Code > Period Classification

This menu is to set for searching target production by period.

System > Code				
Group Name	[▶] ⚙		New	Save
Parent Code	Period Classification			
Code List				

	Code Name	**Key Value**
▼ Period Classification		
Daily	Daily	DAILY_GOAL
Weekly	Weekly	WEEK__GOAL
Monthly	Monthly	MONTH__GOAL
Annually	Annually	YEAR__GOAL

8) System > Code > Search Classification

This menu is to set for searching the production volume by period.

System > Code				
Group Name	[▶] ⚙		New	Save
Parent Code	Search Classification			
Code List				

	Code Name	**Key Value**
▼ Search Classification		
Weekly	Weekly	WEEK_SEARCH
Montly	Montly	MONTH_SEAR...
Annually	Annually	YEAR_SEARCH

9) System > Code > Transmission Cycle

① This menu is to set the transmission cycle to send the shot count of mold to the repeater.

10) System > Product

① This menu is to set the product number and product name.

11) System > User

① This menu is to set the user ID, user name, password and select the department.

12) System > Counter

① This menu is to set the user ID, user name, password and select the department.

② When the mold counter has problem or the battery is replaced, select the corresponding mold counter from the table and enter the current shot count in "Shot count" text box.

6. Status

1) Production

① This menu is to search the product status.

② Place the cursor in the "Mold No" and press the enter key.

③ Select a mold number or mold name in pop up menu.

④ Select the period at search classification filter.

⑤ Click "Search" button.

⑥ Select the mold name or mold number to search the production status.

⑦ If you click the mouse on the right of position "⑦", an arrow appears like " ⑧"and you can Sort by date.

⑧ Click the icon [📄] to import Excel data.

Status > Production

Mold No. ❗	Search Classification	Weekly ▼							Search

📄

Manuf Date		Mold No.	Product ...	Product ...	Period Cl...	Target Qty	Productio...	Performa...	Manager
Start Date	End Date								

⑦

No data

Mold search ✕

Mold No. [   ]

Mold Name [   ]   **Search**

Mold No.	Mold Name
M190910001	Counter001
M190910002	Counter002

Close

Mold No.	M190910001	Search Classification	Weekly ▼						Search

📄

⑧

Manuf Date		Mold...	Produ...	Product...	Period Class...	Targ...	Production ...	Perfor...	Manager
Start Date ↑	End Date								
9-09-2019, 09:16:07	9-09-2019, 15:43:04	M1909...	00001	Top cover	Weekly	10,000	40	0%	Admin

2) RealTime

① This menu shows the product name, product yield, mold counter id, mold guarantee quantity, and battery status of the counter in real time.

② This menu is refreshed every 10minutes.

③ Click on the displayed product name to see the "Unit per Hour", "Performance", "Guarantee Ratio" and "Actual".

7. Management

1) Mold

Management > Mold							New	Save	Delete

Mold No.	M190910001	Mold Name	Counter001	Location	Factory1 ▼
Product No.	00001	Product Name	Top cover	Counter ID	WIZ03D
Cavity	4	Customer	Agados ▼	Manufacturer	UJS ▼
Manuf Date	9-08-2019 📅	Material	ABS ▼	Guarantee Qty	1,000,000
Period Classification	Weekly ▼	Target Qty	10,000	User	Admin ▼

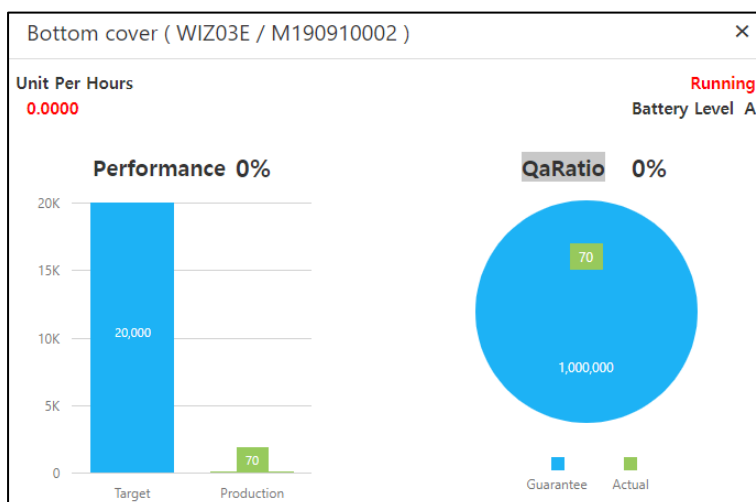| Mold Name	Cavity	Customer	Manufacturer	Manuf Date	Material	Guarantee ...	Period Clas...	Target Qty	User
Counter001	4	Agados	UJS	9-08-2019	M1	1,000,000	Weekly	10,000	Admin
Counter002	4	Wizconnected	JMECA	9-08-2019	M3	1,000,000	Weekly	20,000	Shawn

① Click "New" button,

② Enter the mold name, Cavity, guarantee Qty and Target Qty.

③ Select the location of mold, customer, manufacturer, material, period classification and user.

④ Click "Save" button.

8. Drawing

■ Repeater
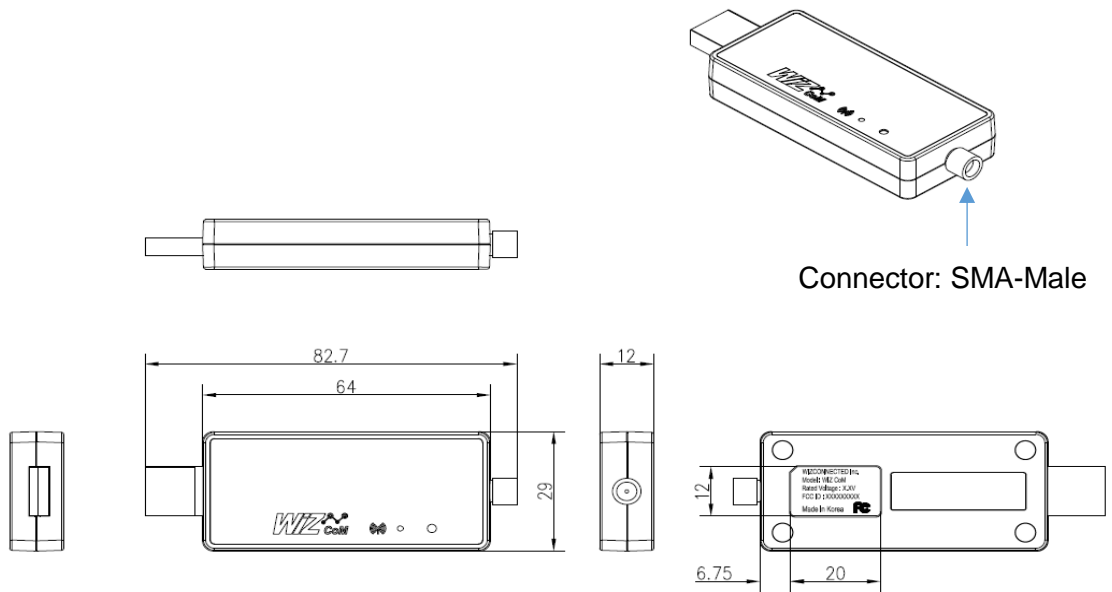
Connector: SMA-Male

The connector type of the repeater is SMA male.

■ Antenna
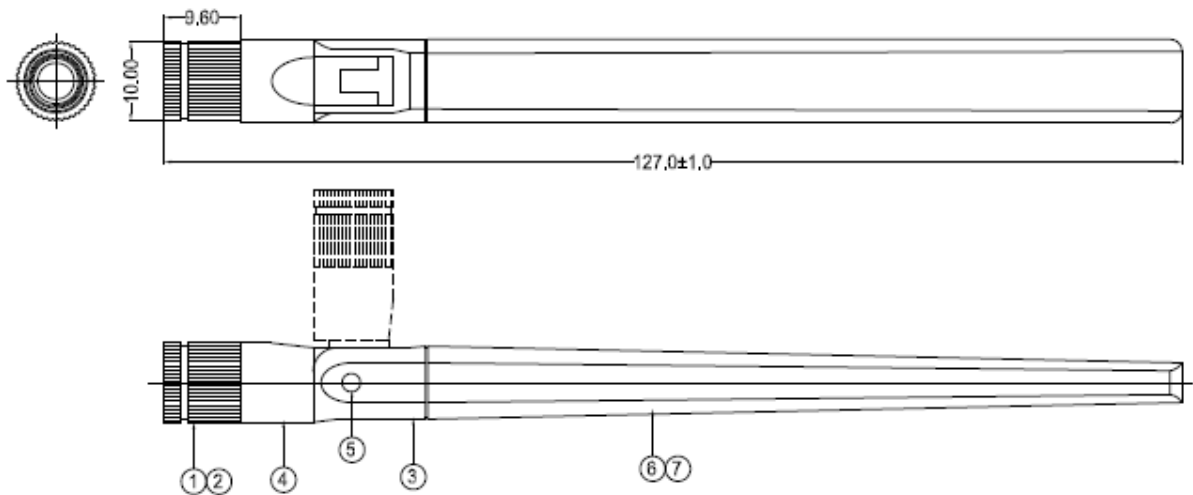
Antenna connector type is SMA female.

9. Installation

① Plug the repeater into an industrial PC and attach it to the wall using the Velcro tape

on the wall at an angle of up to 10 degrees from the height where the mold counter is mounted on injection machine.

② The antenna should be fixed downward with the wall to be 30° ~ 45°.

In the field, the distance between the repeater and the mold counter should be measured to determine the appropriate height, position, and antenna angle.

③ Plug the Ethernet cable into the industrial pc.

9. Federal Communications Commission(FCC) Interference Statement

FCC Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

There is one statement for this product:
The device must carry a label stating "FCC ID: 2ATP8WIZCOM".

Note: The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product.

Disclaimers

The manufacturer, importer, and distributor shall not be liable for damages including accidental and personal injury due to the improper use or operation of this product. The information in this user manual was written based on current product specifications. The manufacturer, Wizconnected Inc., is adding new complementary features and will continue to apply new technologies in the future. Product specifications may be changed without prior notice.

Wizconnected Inc., is not responsible for data loss due to product use.

Exposure statement

The transmitter must not be co-located or operated in conjunction with any other antenna or transmitter. This equipment complies with the FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the antenna and any part of your body.